OEQC LIBRARY

AMENDMENT

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE HALE POHAKU MID-LEVEL FACILITIES MASTER PLAN MAUNA KEA SCIENCE RESERVE, HAMAKUA DISTRICT COUNTY OF HAWAH STATE OF HAWAH

August 1980

Submitted by the

Department of Land and Natural Resources and the University of Hawaii

The amendment to the Revised EIS for the Mid-Level
Facilities Master Plan at Hale Pohaku provides further clarification
concerning the impact to the mid-level facilities if additional telescopes
are placed at the summit of Mauna Kea. Based on a reconnaissance
survey of the summit area, there are sites that appear suitable for
astronomy facilities. However, an in-depth evaluation needs to be made
to assess each site and its impact on the environment. No doubt, there
may be other sites developed in the future. However, there will be full
compliance with the Mauna Kea Plan and the approval of the Board of
Land and Natural Resources prior to any commitments being made by the
University.

The actions described in the subject EIS relate to a proposed mid-level support facility at Hale Pohaku, Mauna Kea, at an altitude necessary for acclimitization of personnel who must work in the rarified atmosphere of the 13,796-foot summit. Although the facility is being planned to support the existing six telescopes on the summit which have

NI BLA been previously approved by the Board of Land and Natural Resources, the following additional information is to provide as much information as feasible based on presently available knowledge and facts about possible future activities and related projects which may have an impact in the area.

This effort is being made to examine possible effects that additional telescopes might generate at the mid-level, even though no official applications for such telescopes have been received by the University of Hawaii as of this date. The recently publicized National Radio Astronomy Observatory radio telescope that was planned for the summit, was not included in the President's Budget (Federal) and will most likely not be funded by Congress for FY 1981.

Mauna Kea is internationally recognized as a superior site for ground-based astronomy. Therefore, it can be anticipated that the State will receive requests -- both from within the United States and from foreign countries -- for permission to locate telescopes on Mauna Kea. If the University believes it valuable to support applications for additional facilities in the Science Reserve Area of Mauna Kea, such approvals must be in conformance with the conditions stated in the Mauna Kea Plan, the policy plan for the region.

The Mauna Kea Plan requires that applications for new facilities on the summit, beyond those existing and approved, must be accompanied

by a comprehensive justification showing: (a) public benefit to the people of Hawaii; (b) public necessity in terms of cooperative use of facilities; (c) evidence that Mauna Kea is the best site for such a facility; and (d) compatibility with other uses of Mauna Kea within the terms of the lease between the University of Hawaii and the Board of Land and Natural Resources. In addition, the University of Hawaii will require that the necessary support for the facility (access, utilities, etc.) is available or proposed and that the telescope can be accommodated on Mauna Kea without any significant adverse impact on other existing activities at the summit. All applications for proposed summit facilities are also subject to approval under DLNR Regulation 4, relating to Conservation District and other Federal, State and County regulations.

It is recognized that if new telescopes are approved and built, they may affect the size of the programmed mid-level facilities at Hale Pohaku and could generate additional environmental impacts to the area. However, because any new proposed telescope would be subject to a rigorous acceptance procedure and because of the changing state of technology, it is very difficult to estimate accurately the kind, magnitude or expected time of occurrence of these potential impacts.

Changing technology makes prediction of possible future impacts very speculative. Any assessment of probable impacts of new summit facilities on the Hale Pohaku accommodations must take into

consideration the increasing emphasis on remote operation of scientific instrumentation at astronomical observatories and the effect of this new technology on "on-site" personnel requirements. Developments in remote control, which have been fundamental to the advancement of space science and spacecraft operation, have also opened up the possibility in the future of operating scientific instruments at remote locations with much less human intervention. The instrumentation and data-acquisition functions of the Multi-Mirror Telescope in Arizona, for example, were designed to be operated by remote control via computer in much the same way as an unmanned spacecraft is operated. This technological advancement has obviated the need for scientists to be present on site at all times. Because of the distinct advantages in flexibility, cost savings and operating efficiency of this mode of operation over existing methods (which require all manpower to be "on-site"), it can be expected that as new telescopes are designed, this technology will be adapted to ground-based instruments, thus reducing the number of personnel necessary to be "on-site" for the newer, more advanced telescope. However, if remote control of the telescope is not feasible for certain operations that will require "on-site" staffing, each request will have to be fully assessed as to its environmental and support services requirements. Any actions resulting in significant impacts to the summit or the mid-level facilities will have to comply with provisions of Chapter 343, HRS, and the Endangered Species Act of 1973, as amended in 1978 (PL 95-632).

Although advances in science and technology will result in a reduction of "on-site" manpower for astronomy operations, some scientists and technical personnel will still be required to be present at the telescopes, the need for the presence of scientists with new instrumentation and for technical personnel to maintain, modify and test the instrumentation will remain. In addition, existing telescopes such as the six that are now in operation on Mauna Kea, will probably need to retain most of their full complement of "on-site" support staff for the foreseeable future, until such time as possibilities for new technology are proposed, funded, and eventually developed to allow economical remote control of their particular operations. At the present time, no telescope that is operational has been adapted to remote control, and funding to develop this technology would be extremely expensive and very difficult to obtain.

Because the number of additional telescopes that will be located on Mauna Kea and the number of personnel in the future who will work "on-site" and need to acclimatize at Hale Pohaku is unknown, it is impossible to accurately estimate potential future expansion needs, if any, at the mid-level facility. Cost constraints, technology, and environmental considerations, will also be limiting factors. The cost of construction on the slopes of Mauna Kea can be extremely expensive —over two times greater than at sea level — and this also makes it advantageous to keep construction to a minimum. In view of these constraints, the Hale Pohaku Mid-Level Facility proposed for the

existing six telescopes, as described in this EIS, is the minimum development needed to provide the necessary mid-level research support for the summit.

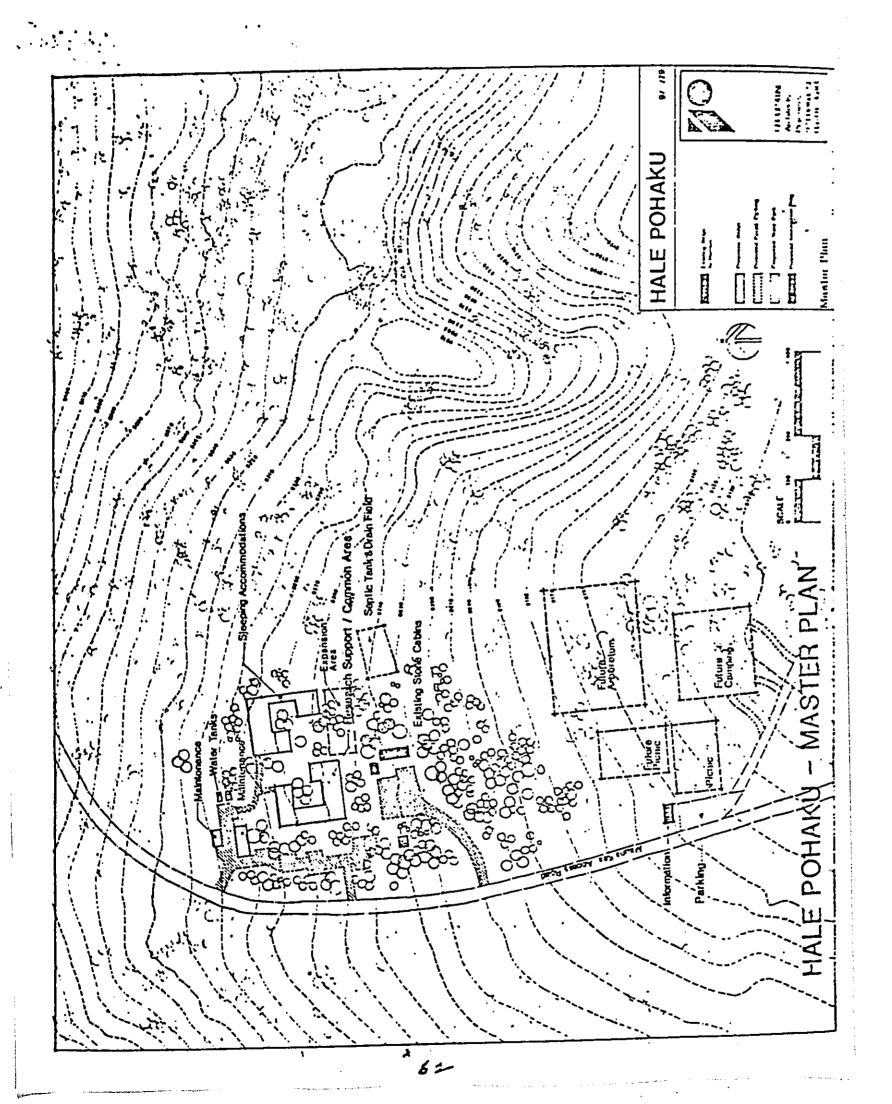
If expansion becomes necessary at Hale Pohaku, space is available in the area designated for the facility in the Hale Pohaku Master Plan (see also attached map). This space is located within the existing disturbed site where adverse environmental effects would be minimal. It is expected, though, that technological advancements, cost constraints scheduling and/or modification of the programmed space described in the EIS would all act to minimize future construction.

Pohaku, the addition will be located within the approximate seven acres for the facilities. The structure will be located within the proposed expansion area where the least disturbance as determined with the assistance of a qualified botanist, to the land and vegetation will result. If any mamane trees are to be removed, they will be relocated or replaced with seedlings from approved source. The over-all impact of the expansion if developed, is not expected to have a significant impact on the Palila critical habitat, as long as the expansion is restricted to the allocated area.

To summarize, although additional sites do exist on Mauna Kea that may be suitable for the placement of telescopes, and although it can be anticipated that more requests for approval to place telescopes on Mauna Kea

will be received, each application will have to undergo the rigorous review process described earlier. Further, it is expected that the accommodations at the Hale Pohaku facility will not expand in direct relationship to the increase in the number of scientific facilities at the summit. If necessary, however, expansion can be accommodated in the area within the designated permanent mid-level facility where the least disturbance to the terrain, vegetation and fauna will be involved.

This additional information is to clarify the relationship existing between the controlled development at the summit and the midlevel facility.



GEORGE R. ARIYOSHI

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RICHARD O'CONNELL DRECTOR

> TELEPHONE NO. 548-5915

OUL LO AU

STATE OF HAWAII

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

SSO HALEKAUWILA STSTATE OF HAWAII

HONOLULU, HAWAII 96813

July 21, 1980

MEMORANDUM

TO:

Susumu Ono, Chairman

Department of Land and Natural Resources

FROM:

Richard L. O'Connell, Director

Office of Environmental Quality Control

SUBJECT:

Amendment to the Revised Environmental Impact Statement for the Hale Pohaku Mid-Level Facilities Master Plan, Mauna Kea Science Reserve, Hamakua

District

We reviewed the subject document and offer the following comments for your consideration.

REGULATIONS (Page 3)

The statement, "All applications for proposed summit facilities are also subject to approval under DLNR Regulation 4, relating to Conservation District and other applicable Federal regulations," should be amended to include, "other Federal, State, and County regulations."

REMOTE CONTROL

Although the amendment discusses the impact from remote control devices, consideration should also be given to conditions when remote control may not be feasible or available.

CONSULTATION WITH U.S. FISH AND WILDLIFE

We wish to point out that any expansion of the mid-level facility would require another formal consultation process

Susumu Ono July 21, 1980 Page 2

with the U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act.

PALILA CRITICAL HABITAT

The amendment fails to discuss the impact on the palila if expansion occurs. Will the palila habitat be significantly affected? Will more mamane trees be removed? How will this affect the palila?

We trust that our comments will be helpful to you. For your convenience, we have attached a list of commenting agencies and organizations.

If you should have any questions regarding this document, please contact us.

Attachment

LIST OF COMMENTING PARTIES

FEDERAL	
U.S. Coast Guard	June 23, 1980
*Department of Energy	June 24, 1980
*Soil Conservation Service	June 25, 1980
Department of the Air Force	July 7, 1980
*Naval Base Pearl Harbor	July 7, 1980
*Department of the Army (USASCH)	July 7, 1980
*U.S. Fish and Wildlife Service Dept. of the Army, U.S. Army Engr. Dist.	July 14, 1980 July 14, 1980
STATE	
*Department of Defense	No Date
State Energy Office	June 24, 1980
Department of Agriculture	June 25, 1980
Department of Transportation	July 2, 1980
Department of Accounting & General Services	July 3, 1980
*Department of Health Dept. of Planning & Economic Dev. COUNTY OF HAWAII	July 9, 1980 July 23, 1980
*Department of Public Works	June 25, 1980
*Planning Department	June 30, 1980
*Department of Parks and Recreation	July 2, 1980
*Department of Water Supply	July 2, 1980
UNIVERSITY OF HAWAII	
*Environmental Center	June 25, 1980
*Harold L. Lyons Arboretum Water Resources Research Center	July 76, 19880
PRIVATE	
*Hawaiian Telephone	June 30, 1980
*Bishop Museum	July 2, 1980

^{*}Denotes comment forwarded to DLNR by reviewer



DEPARTMENT OF TRANSPORTATION UNITED STATES COAST GUARD

COMMANDER (dpl)
Faurteenth Coast Guard District
Prince Kalanianaale Federal Bldg.
300 Ala Maana Blvd.
Hanolulu, Hawaii 96850

16450 23 June 1980

Environmental Quality Commission 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

Dear Sir:

The Coast Guard has reviewed the West Beach Resort proposal and has no objection or constructive comments to offer at the present time.

J. F. OTRANTO

Commander, U. S. Coast Guard
District Planning Officer
Fourteenth Coast Guard District
By Direction of the District Commander





Department of Energy Pacific Area Support Office P. O. Box 29939 Honolulu, Hawaii 96820

Gentlemen:

As requested by your June 20, 1980 letter, we have reviewed the .
"Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility
Master Plan" and have no comments to offer.

Thank you for offering us the opportunity to participate in the EIS process. . .

Sincerely,

William J. Stanley

Director

OP-373 JWM:bh

cc: Dept of Land & Natural Resources, Hono, HI

/



Soil · · Conservation Service

P. O. Box 50004 Honolulu, Hawaii 96850

June 25, 1980

Mr. Richard L. O'Connell
Director, Office of Environmental
Quality Control
550 Halekauwila St., Room 301
Honoluly, Hawaii 96813

Dear Mr. O'Connell:

Subject: Amendment to the Revised EIS for Hale Pohaku

Mid-Level Facility Master Plan, Mauna Kea Reserve,

Hamakua District, Hawaii

We have reviewed the subject amendment to the revised EIS and have no comments to offer.

Thank you for the opportunity to review this amendment.

Sincerely,

JACK P. KANALZ

State Conservationist

cc:

Department of Land and Natural Resources

P. O. Box 621

Honolulu, Hawaii 96813

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JU)

DEPARTMENT OF THE AIR FORCE HEADQUARTERS 15TH AIR BASE WING (PACAF) HICKAM AIR FORCE BASE, HAWAII 96853



TFTH OF DEEV (Mr Shepard, 449-1831)

7 JUL 1980

Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan

70: Office of Environmental Quality Control 550 Halekauwila Street, Room 301 Honolulu, HI 96813

- 1. Reference your letter, 20 June 1980.
- 2. This office has reviewed the subject amendment to the EIS and has no comment to render relative to the proposed project.
- 3. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your project and thank you for the opportunity to review the do ment.

ROBERT Q. K. CHING

Chief, Engrg & Envmtl Plng Div Directorate of Civil Engineering

Lange

HEADQUARTERS NAVAL BASE PEARL HARBOR BOX 110 RECEIVED PEARL HARBOR, HAWAII 96860

IN REPLY REFER TO:

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7 JUL 1980

Jef I. C. LARD & NATUKAL RESOURCES STATE OF HAWAII

Office of Environmental Quality Control 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

Gentlemen:

Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan

The Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility
Master Plan forwarded by the Environmental Quality Commission's letter of
20 June 1980 has been reviewed and the Navy has no comments to offer.

Thank you for the opportunity to review the subject amendment.

Sincerely,

R. D. EBER
CDR, CEC, USN
FACILITIES ENGINEER
BY DIRECTION OF THE COMMANDER

Copy to: State DLNR

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JEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

Office of Environmental Quality Centrol 550 Haleksuwils Street, Room 301 Honolulu, Hawaii 96813

0 7 JUL 1980

Gentlemen:

The Amendment to the Revised Environmental Impact Statement for the Hale Pohaku Mid-Level Facility Master Plan has been reviewed. It appears unlikely that future expansion of the proposed facility will have a significant adverse effect on the environment or Army activities in the area. Nevertheless, incremental expansion necessitated by additional telescopes on the summit of Mauna Kea should be analyzed in separate environmental assessments or environmental impact statements when details of the project(s) become known.

Sincerely,

original staned by

ADOLPH A. HIGHT COL, EN Director of Engineering and Housing

Copy Furnished:
Department of Land and Natural
Resources
P.O. Box 621
Honolulu, Eswaii 96809



United States Department of the Interior

FISH AND WILDLIFE SERVICE

300 ALA MOANA BOULEVARD P.O. BOX 50167 HONOLULU, HAWAII 96850

ES Room 6307

July 14, 1980

Rec'd Ping. Ofc JUL 2 8 1980 3. aug _____ Estelle Gorbert ---File in ___

Office of Environmental Quality Control Office of the Governor 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

> Re: Revised EIS for Hale Pohaku Mid-Level Facility Master Plan, Mauna Kea Science Reserve. Hawaii

Dear Sir:

We have reviewed the amendment to the subject revised EIS.

The project will have little, if any, adverse impact on fish and wildlife resources in the area, hence we have no additional comments.

Thank you for keeping us informed about changes in the EIS and Master Plan.

Sincerely yours,

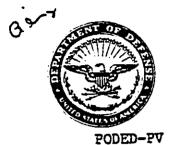
Return to _

Nevin D. Holmberg Deputy Project Leader for **Ecological Services**

cc: DLNR



Save Energy and You Serve America!



DEPARTMENT OF THE ARMY U. S. ARMY ENGINEER DISTRICT. HONOLULU BUILDING: 230 FT. SHAFTER, HAWAN 96858

T. SHAFTER. HAWAN 96858

14 July 1980

STATE OF HARPAILES

Mr. Richard O'Connell, Director Office of Environmental Quality Control State of Hawaii 550 Halekauwila Street, Room 301 Honolulu, Hawaii 96813

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Dear Mr. O'Connell:

We have reviewed your "Amendment to the Revised Environmental Impact Statement (REIS) for the Hale Pohaku Mid-Level Facilities Master Plan, Mauna Kea Science Reserve, Hamakua District, County of Hawaii, State of Hawaii, forwarded to us on 20 June 1980. We have prepared the following comments:

No U.S. Army Corps of Engineers Civil Works program would be affected by the amendment to the REIS of the Master Plan if the project were implemented. There are no Corps regulatory requirements that are applicable to the project.

The proposed facility at Hale Pohaku and the entire Mauna Kea area are situated in an area of minimal flooding (zone C), and therefore are not subject to the 100-year flood which is a flood having a one-percent chance of being equalled or exceeded in any given year. This was determined from the flood insurance study for the island of Hawaii, prepared by the Federal Insurance Administration. Thank you for the opportunity to comment on the emended REIS.

Sincerely,

KISUK CHEUNG Chief, Engineering Division

Copy Furnished:

/ Director
Department of Land and
Natural Resources
State of Hawaii
P.O. Box 621
Eonolulu, Hawaii 96309

Brook

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DEFARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
OFFICE OF THE ADJUTANT GENERAL
OFFICE OF THE ADJUTANT GENERAL
Honolulu, Hawaii 96316

S. A. E. C. L. Will

HIENG

3 0 JUN 1980

Office of Environmental Quality Control 550 Halekonwila Street, Room 301 Honolulu, Hawaii 96813

Gentlemen:

Amendment to the Revised EIS for Halo Pohaku Mid-Level Facility Master Plan

Thank you for sending us a copy of the above subject project. We have no comments to offer at this time.

Sincerely,

JERRY M. MATSUDA Captain, HANG

Contr & Engr Officer

CC:



DONALD A. BREMNER Chairman

/

Executive Secretary
TELEPHONE NO.
(808) 548-6915

STATE OF HAWAII ENVIRONMENTAL QUALITY COMMISSION OFFICE OF THE GOVERNOR SSO HALEKAUWIA ST. ROOM 301 HONOLULU, HAWAII 98813

June 20, 1980

Dear Reviewer:

The following document is enclosed for your review:

Title: Amendment to the Revised EIS for Hale

Pohaku Mid-Level Facility Master Plan

Location: Mauna Kea Science Reserve, Hamakua

District, Hawaii

Classification: Agency Action

Your comments or acknowledgement of no comments on the amendment are welcomed. Please submit your reply to the accepting authority:

Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, Hawaii 96813

Please send a copy of your reply to the proposing party:

Department of Land and Natural Resources P.O. Box 621 Honolulu, Hawaii 96809

Your comments must be received or postmarked by:

July 23, 1980

Thank you for your participation in the EIS process.

80:619

June 24, 1980

State Energy Office has no comments.

Sincerely,

Alfred S. Harris



JOHN FARIAS, JR.
CHAIRMAN, BOARD OF AGRICULTURE
YUKIO KITAGAWA
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF AGRICULTURE
1428 SO. KING STREET
HONOLULU, HAWAII 96814

June 25, 1980

MEMORANDUM

To:

Office of Environmental Quality Control

Subject:

Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan TMK: 4-4-15:I Mauna Kea Science Reserve

The Department of Agriculture has reviewed the subject document and has no comments.

We appreciate the opportunity to comment.

JOHN FARIAS! JR.

Chairman, Board of Agriculture



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

869 PUNCHBOVAL STREET
HONOLULU. HAWAII 96813

July 2, 1980

RYCKICHI HIGASHIONNA, Ph.D. DIRECTOR

DEPUTY DIRECTORS

JACK K SUWA

JAMES R. CARRAS

JAMES B. MCCORMICK

JONATHAN K. SHIMADA, Ph.D.

IN REPLY REFER TO:

STP 8.6368

MEMORANDUM

TO:

DR. RICHARD O'CONNELL, DIRECTOR

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM:

DIRECTOR OF TRANSPORTATION

SUBJECT:

AMENDMENT TO THE REVISED EIS FOR HALE POHAKU

MID-LEVEL FACILITY MASTER PLAN

Thank you for the opportunity to review the subject amendment. We have no substantive comments to offer which could improve the document.

Ryokichi Higashionna

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10391 7 0 JUL

GEORGE R. ARIYOSHI GOVERNOR



STATE OF HAWAII DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES DIVISION OF PUBLIC WORKS P. O. BOX 119, HONOLULU, HAWAII 96810

COMPTROLLER
MIKE N. TOKUNAGA

DEPUTY COMPTROLLER

HIDEO MURAKAMI

LETTER NO. (P) 1727.0

JUL - 3 1990

Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, Hawaii 96813

Gentlemen:

Subject: Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan

Thank you for this opportunity to review and comment on the subject document.

We have reviewed the amendment and understand that the environmental impact caused by future construction of additional telescopes at the mid-level cannot be evaluated at the present time. As such, we have no comments to present on the subject document.

Very truly yours,

Kikio nishioka

State Public Works Engineer

MI:ck

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GEORGE R. ARIYOSHI GOVERNOR OF HAWAII

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SUPPLIES OF LAND A MATUMAL RESOURCES STATE OF HAWAII



STATE OF HAWAIF DEPARTMENT OF HEALTH

HONOLULU. HAWAII 98807

July 9, 1980

GEORGE A. L. YUEN

DIRECTOR OF HEALTH

DEPUTY DIRECTOR OF HEALTH

HENRY N. THOMPSON. M.A. DEPUTY DIRECTOR OF HEALTH

DEPUTY DIRECTOR OF HEALTH

DEPUTY DIRECTOR OF HEALTH

In reply, please refer to: File: EPHS-SS

MEMORANDUM

To:

Mr. Susumu Ono, Chairman of the Board Department of Land & Natural Resources

From:

Deputy Director for Environmental Health

Subject: Environmental Impact Statement (EIS) for Hale Pohaku Mid-Level

Facility Master Plan, Mauna Kea Science Reserve, Hamakua

District, Hawaii

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we do not have any objections to this project.

For your information, current restroom facilities for public's use are unsanitary and inadequate.

We realize that the statements are general in nature due to preliminary plans being the sole source of discussion. We, therefore, reserve the right to impose future environmental restrictions on the project at the time final plans are submitted to this office for review.

cc: Chief Sanitarian, Hawaii OEQC

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AND: 45 July 23, 1980

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Mr. Richard L. O'Connell, Director Office of Environmental Quality Control 550 Halekauvila Street, Room 301 Honolulu, Hawaii 96813

Dear Mr. O'Connell:

Subject: Amendment to the Revised Environmental Impact Statement

for the Hale Pohaku Mid-Level Facility Master Plan,

Mauna Kea Science Reserve

We have reviewed the subject document and find that it serves to further refine and elaborate upon the question of increased usage of midlevel facilities serving the Mauma Kea Science Reserve. As new ground based astronomy facilities are proposed for the summit of Mauna Kea, their corresponding impacts on limited infrastructure capacities at Hale Pohaku should be thoroughly evaluated to minimize conflict with those ongoing programs and activities which have already been approved.

Thank you for the opportunity to review and comment upon this document.

Frime Skrivanek

Hideto Kono

Department of Land and Natural Resources



COUNTY OF HAWAII DEPARTMENT OF PUBLIC WORKS HILO, HAWAII 96720

June 25, 1980

Mr. Donald A. Bremmer, Chairman Office of Environmental Quality Control 550 Halekauwila Street, Room 301 Honolulu, HI 96813

SUBJECT: AMENDMENT TO THE REVISED EIS FOR HALE POHAKU MID-LIVEL FACILITY MASTER PLAN

Thank you for your June 20, 1980 letter transmitting the subject amendment for our comments.

We have reviewed the amendment and have no comments to offer.

EDWARD HARADA Chief Engineer

cc: Department of Land & Natural Resources

Surply

PLANNING DEPARTMENT

COUNTY OF HAWAII

25 AUPUNI STREET

HILO, HAWAII 96720

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ATEN A

STATE OF HAWAII

June 30, 1980

Mr. Donald A. Bremmer, Chairman Office of Environmental Quality Commission 550 Halekauwila Street, Room 301 Ecnolulu, Hawaii 96813

Dear Mr. Bremer:

Amendment to the Revised ANS for Hale Pohaku Mid-Level Facility Master Plan, Hamakus, Eswaii

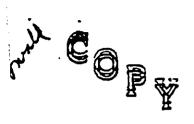
Thank you for sending the subject document to us for review. Please note that we have no adverse comments to offer at this time. Nahalo.

Sincerely,

SIEMEY FORE Birector

28:7

co: Susumu Ono, Dept. of Land & Hatural Resources



BEPARTMENT OF PARKS & REGREATION EBUNTY OF HAWAII HILS: HAWAII \$8770

July 2, 1980

SIALURA STATE OF HALVE OF

Subject: Amendment to the Revised EIS for Hale Pohaku

Mid-Level Facility Master Plan Mauna Kea Science Reserve

We have reviewed the subject document and have no adverse comments to offer.

Thank you for the opportunity to review the report.

Milton T. Hakoda

Director

MTH: GM: ai

cc: Dept. of Land and Natural Resources

18 AH . 05



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

P. O. BOX 1820

HILO, HAWAII 96720

25 AUPYNI STREET

July 2, 1980

30 JUL 7 All: 26

DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

Environmental Quality Commission Office of the Governor 550 Halekauwila Street, Room 301 Honolulu, HI 96813

AMEHUMENT TO THE REVISED EIS FOR HALE POHAKU MID-LEVEL FACILITY MASTER PLAN MAUNA KEA SCIENCE RESERVE, HAMAKUA, HAMAII

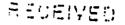
we have no adverse comments to offer on the subject Environmental Impact Statement.

H. William Sewake Hanager

GK

cc - Department of Land and Natural Resources

... Water brings progress...





Dur University of Hawaii at Manoa

Environmental Center

Grawford 317 • 2550 Campus Road

Honolulu, Hawaii 96822

STATE OF HAWAII

Telephone (808) 948-7361

Office of the Director

June 25, 1980

Mr. Richard O'Connell Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, Hawaii 96813

Dear Mr. O'Connell:

Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan Mauna Kea Science Reserve, Hawaii

The Environmental Center has received the above cited amendment. We have no comments to make regarding the material in the document at this time.

We appreciate the opportunity to review the amendment.

Sincerely,

Doak C. Cox Director

DCC/dh

cc: Department of Land and Natural Resources John Sorensen

AN EQUAL OPPORTUNITY EMPLOYER

30 JUL 10 AID: 48 14 311: 39

07 July 1980

Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, HI 96813

Gentlemen:

This is to advise you that our staff has received "Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan" dated June 20, 1980. We have no further comments to make.

Thank you for providing us with an opportunity to review the plan.

Sincerely yours,

Yoneo Sagawa **Director** Lyon Arboretum

YS:jm

/cc: Department of Land and Natural Resources

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UNIVERSITY OF HAWAII

80 JUL 25 A 8: 30

Water Resources Research Center

A NATURAL RESOURCES STATE OF HAWAII 16 July 1980

Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, Hawaii 96813

Subject: Review of Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility

Gentlemen:

We have reviewed the amendment and have no comments to submit on the subject EIS.

Thank you for the opportunity to review and submit comments on this amendment.

Sincerely,

Henry K. Gce

Acting WRRC EIS Coordinator

Money K Du

HKG:jm

cc: F. Peterson

E. Murabayashi

HAWAIIAN TELEPHONE

30 JUL 2 A7: 51

June 30, 1980

STATE OF HAWAII

Office of Environmental Quality Control 550 Halekauwila Street Room 301 Honolulu, Hawaii 96813

Gentlemen:

Amendment to the Revised EIS for Hale Pohaku Mid-Level Facility Master Plan

This acknowledges receipt of your June 20, 1980 letter regarding the subject matter. We have no objections to the amendment or comments to offer.

Sincerely,

1. 12. ...

Richard Mau Engineering and Construction Staff Manager

cc: Temperature Committee P. O. Box 621

Honolulu, Hawaii 96809

BERNICE P. BISHOP MUSEUM

P.O. Box 19000 - A. Honolulu, Hawaii 96819 . Telephone 847-3511
July 2, 1980

Office of Environmental Quality Control Room 301 550 Halekauwila Street Honolulu, Hawaii 96813

Dear Sirs:

Thank you for sending us the amendment to the revised EIS for Hale Pohaku Mid Level Facilities Master Plan for review.

As you know Dr. Patrick McCoy of the Department of Anthropology at the museum conducted the archaeological reconnaissance of the area for the EIS in August 1979.

At that time he concluded that there was no chance of the facility causing any adverse environmental impacts to the historical and archaeological resources in the project area.

His survey suggested that there were no archaeological sites in the area because of environmental conditions adverse to the maintenance of permanent or seasonal settlement. There is no rock in the vicinity suitable for adze-making, the principal human prehistoric activity at this height and above on Mauna Kea.

On the basis of his survey and the declaration of no impact on archaeological resources that resulted from it, we feel that no further archaeological survey is necessary for the additional area of the proposed amendment.

If, however, any archaeological sites should come to the attention of the designers or contractors in the area the Dept. of Land and Natural Resources. Historic Preservation Office should be contacted immediately for the preparation of a plan for mitigation of impact.

Based on Dr. McCoy's survey, however, and the map of the proposed expansion of the mid-level facility, there seems little likelihood that such action will be necessary.

Thank you for sending us the amendment for our files and for your continuing interest in preserving Hawaii's past.

Sinderely,

Thomas J. Rivey, Ph.D. Staff Anthropologist

Encls.

cc: Dept. of Land and Natural Resources

BERNICE L. BISHUP MUSEUM

1. O. Box 6037. Honolulu, Hawaii 96818 . Telephone 847 3514

August 22, 1979

Mr. Francis Oda President, Group 70 Inc. 924 Bethel Street Honolulu, Hawai'i 96813

Dear Mr. Oda:

The archaeological reconnaissance survey you requested for preparation of the Mauna Kea Mid-Elevation Facilities Master Plan was conducted on August 17, 1979. As I expected, we found no archaeological or historic sites in either of the two upper-elevation alternative areas, at Hale Pōhaku and at the 8000-ft elevation. The gate to the Humu'ula Sheep Station was padlocked; because we did not have permission to enter the land, we did not inspect the grounds within the fenced area. In view of what you said about the viability of this third alternative location for the astronomy facilities, it did not seem warranted to trespass. There are no visible archaeological remains in the general area of the station, however, and thus no reason to predict that any exist within the Station proper. The absence of sites in the surveyed areas is understandable for reasons briefly outlined below.

The Mauna Kea Summit Road, from the Saddle Road junction to Hale Põhaku, is in a high-elevation, moderately arid environment that on current evidence was minimally exploited by pre-contact Hawaiians. There is, for example, no adze-quality basalt in this area and no other apparent resources (e.g., birds and wood) that would have required the establishment of camps with substantial housing during short periods of resource exploitation. The most likely locations of any such camps in proximity to the modern summit road would have been along the Humu'ula Trail. Archaeological sites have been found along the trail, but all of them are located much higher on the mountain, in the adze quarry. The known site nearest to Hale Põhaku is at roughly the 10,000-ft elevation on Waikahalulu Gulch.

If the Humu'ula Sheep Station should be reconsidered as a potential site for the astronomy facilities, further archival research may be required to establish the Station's historical significance. Joseph Brennan mentions in his book, The Parker Ranch of Hawaii, that the Humu'ula Sheep Station was added to the ranch holdings on March 3, 1914, and that the area was prime sheep country. There is, then, some history associated with the Station, but I don't know whether or not any of the original buildings remain.

We appreciate the opportunity to do this survey for you. Please call me if we can be of any further assistance.

Sincerely,

Patrick C. McCoy Archaeologist

PCM: gmc

EORGE R. ARIYOSHI GOVERNOR



RICHARD O'CONNELL DIRECTOR

> TELEPHONE NO. 548-8915

STATE OF HAWAII OFFICE OF ENVIRONMENTAL QUALITY CONTROL

S50 HALEKAUWILA ST. ROOM 301 HONOLULU, HAWAII 96813

July 21, 1980

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MEMORANDUM

TO:

Susumu Ono, Chairman

Department of Land and Natural Resources

FROM:

Richard L. O'Connell, Director

Office of Environmental Quality Control

SUBJECT:

Amendment to the Revised Environmental Impact Statement for the Hale Pohaku Mid-Level Facilities Master Plan, Mauna Kea Science Reserve, Hamakua District

We reviewed the subject document and offer the following comments for your consideration.

REGULATIONS (Page 3)

The statement, "All applications for proposed summit facilities are also subject to approval under DLNR Regulation 4, relating to Conservation District and other applicable Federal regulations," should be amended to include, "other Federal, State, and County regulations."

REMOTE CONTROL

Although the amendment discusses the impact from remote control devices, consideration should also be given to conditions when remote control may not be feasible or available.

CONSULTATION WITH U.S. FISH AND WILDLIFE

We wish to point out that any expansion of the mid-level facility would require another formal consultation process

Susumu Ono July 21, 1980 Page 2

with the U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act.

PALILA CRITICAL HABITAT

The amendment fails to discuss the impact on the palila if expansion occurs. Will the palila habitat be significantly affected? Will more mamane trees be removed? How will this affect the palila?

We trust that our comments will be helpful to you. For your convenience, we have attached a list of commenting agencies and organizations.

If you should have any questions regarding this document, please contact us.

Attachment

LIST OF COMMENTING PARTIES

FEDERAL	
LDLICAL	
U.S. Coast Guard	June 23, 1980
*Department of Energy	June 24, 1980
*Soil Conservation Service	June 25, 1980
Department of the Air Force	July 7, 1980
*Naval Base Pearl Harbor	July 7, 1980
*Department of the Army (USASCH)	July 7, 1980
*U.S. Fish and Wildlife Service	July 14, 1980
STATE	
*Department of Defense	No Date
State Energy Office	June 24, 1980
Department of Agriculture	June 25, 1980
Department of Transportation	July 2, 1980
Department of Accounting & General Services	July 3, 1980
*Department of Health	July 9, 1980
COUNTY OF HAWAII	
*Department of Public Works	June 25, 1980
*Planning Department	June 30, 1980
*Department of Parks and Recreation	July 2, 1980
*Department of Water Supply	July 2, 1980
UNIVERSITY OF HAWAII	
*Environmental Center	June 25, 1980
*Harold L. Lyons Arboretum	July 7, 1980
PRIVATE	
*Hawaiian Telephone	June 30, 1980
*Bishop Museum	July 2, 1980

^{*}Denotes comment forwarded to DLNR by reviewer



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